THE WOMAN WHO FELL FROM THE SKY AND THE PORTSMOUTH, OHIO HOPEWELL EARTHWORKS

George Horton and Terry Stocker

Abstract

We interpret the Portsmouth, Ohio Hopewell earthworks as an effigy of "The Woman Who Fell from the Sky," which is a story of human origins once extant throughout the eastern area of (Native American) North America. Built sometime between A.D. 100 to 500, the Portsmouth earthworks, at 8 miles long, would be the longest human-effigy in the world. Regardless of the ultimate interpretation of the mounds, for the overall size, it seems improbable that no excavations have ever been conducted there. We attempt to contextualize Portsmouth as a gathering place for people from distant places, maybe as a pilgrimage center, and suggest that the Green Corn Ceremony might have been people's motive for going there.

The concept of power among tribal people is related to their understanding of the relationships that occur between the human and nonhuman worlds. They believe that all are linked within one vast, living sphere, that the linkage is not material but spiritual, and its essence is the power that enables magical things to happen.... Mythical accounts from a number of sources illustrate the variety of forms the uses of ritual power can take (Allen 1992: 22-23).

We (the authors) are fortunate to have Native Americans as life-long friends, because without specific learning from those individuals, we might never have written this article. Horton has learned from the Meskwaki (their spelling), his Iowa neighbors, for over 50 years (e.g., Horton 2016).

For those not knowing, the Meskwaki (sometimes called Fox) have a settlement in Iowa. However, they were living in Ontario at European contact; and from there, they were slowly pushed west (Edmunds 1993). In 1830, U.S. government forces removed the Meskwaki from Iowa and resettled them in Kansas (Brown County Indian Reservation). The Sac (related to the Fox) still reside on the Brown County Indian Reservation.

In 1831 (Meskwaki wording) "Revolt of the Squaws" occurred when certain older Meskwaki women decided they would somehow leave Kansas (against federal dictates!) and return to Iowa and somehow buy land to live on (Owen 1904: 22). The only ethnographic details we have are these:

The mother who dies far from her baby's grave loses her darling forever, the mother who keeps

George Horton, Independent Scholar, gmvining@yahoo.com, and Terry Stocker, Ph.D., Independent Scholar, stockerterry@hotmail.com (corresponding author)

Journal of Ohio Archaeology 6:1-15, 2019 An electronic publication of the Ohio Archaeological Council http://www.ohioarchaeology.org near it has two chances for happiness. As she goes over the grave in the path, she may absorb the little soul and have it born again of her body; or if this is denied her, she may have the little spirit flit to and fro as she goes about her work, though it may not enter her habitation. "We go back to the children," said the bereaved Musquakie [Owen's spelling] mothers, "the men may go or stay." They set out, and the men followed and overtook them (Owen 1904: 23).

To reword, the Meskwaki were moved to Kansas, and it was the women who decided to leave their reservation and return to Iowa (against federal dictates!). The men followed. To emphasize, the reason for returning was religious. Once in Iowa, near the small community of Tama, the Meskwaki (men included) sold their horses and bought swampland to live on, so as not to compete with white homesteaders for good land. Eventually, they were able to buy additional land, and they reside on "their" settlement (not a reservation) to this day (complete with a very successful casino).

Not only did Mary Alicia Owen (1904) provide us insights into "Revolt of the Squaws," but other aspects of Meskwaki culture that provide an additional feminist framework for making certain interpretations below. Owen (1904:1) opens her book with this story:

The Musquakies...say that they are descended from a woman whom they call He-nau-ee (Mother). This He-nau-ee came down from the Upper World in a storm.... When He-nau-ee fell into the water on her back the storm ceased.... She lived for eighty days [on an island]. On the eightieth day she gave birth to two sons, who grew to manhood in a few hours, received some instruction from their mother, built a boat, and at sundown paddled over to the mainland....

Problem

The Hopewell culture, existing from approximately A.D. 100 to 500, roughly extended from Wisconsin and Iowa on the northwest to Ontario

on the northeast, down to the Gulf of Mexico, and from Louisiana to Florida. Many of their sites are known for large earthen mound complexes, the largest being in Ohio. This article focuses on the Scioto River in Ohio.

An immense, at nearly 8 miles long, Hopewell mound group once existed in Portsmouth, Ohio, where the Scioto River meets the Ohio River (Figure 1). No part of the Portsmouth earthwork group has ever been excavated, nor have those mounds ever been the topic of extended interpretation. Very little of the site now exists. Did the Hopewell mounds of Portsmouth, Ohio represent The Woman Who Fell from the Sky?

A second, though abbreviated, objective will be to try to determine what the Portsmouth site meant for the Hopewell people who conceived of its construction, for those who constructed it, and for those who visited it to either participate in or observe ceremonies.

Methodology

In 1972, on an archaeological project in Mexico, we (the authors) met and became lifelong friends with the common thread of discussing Native American prehistoric lifeways. So, we vaguely knew that, for many Native Americans of the eastern United States, humanity began when a woman fell to Earth. However, with significant input from Meskwaki individuals, we began to see the Portsmouth mound group as representing the common origin story of almost all eastern Native Americans: The Woman Who Fell from the Sky (cf. Elm and Antone 2000).

Subsequently, we employed ethnographic data on Native American religious beliefs and ceremonies to interpret the Portsmouth, Ohio site. This, even though we certainly agree with Flannery and Marcus (1993) that cognitive insights diminish as the distance widens between historical and archaeological data (cf. Voegelin and Voegelin 1944). Still, we feel that most eastern Native American groups' basic animistic beliefs were/are similar enough for us to decode the Portsmouth earthworks using the religious ideology of those eastern

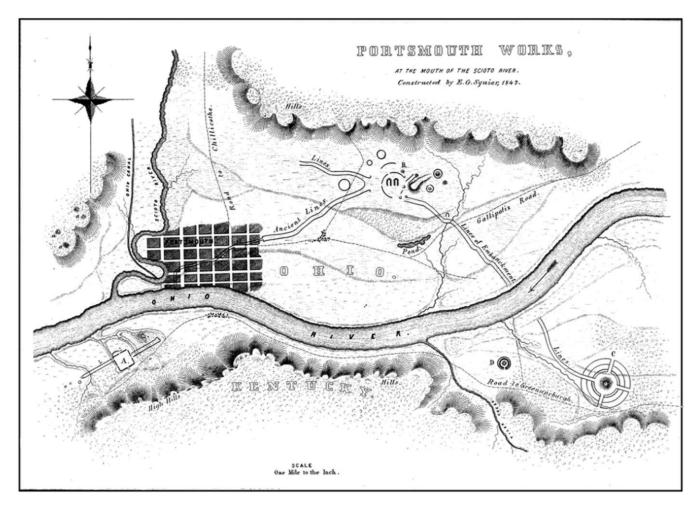


Figure 1. Portsmouth mounds after Squier and Davis (1848: Plate XXVII).

groups. Indeed, we are not the first to connect archaeology and traditional Native American knowledge. In fact, Robert Hall (1997) has already laid significant groundwork for using Native American ethnography for interpreting the Hopewell culture. More recently, Colwell-Chanthaphonth and Ferguson (2010) elaborate that Native American religious practices contain cultural and historical information that can inform archaeological interpretation. Their work was conducted in the Hopi and Zuni areas of Arizona.

More specific for this article, J.N.B. Hewitt (1859-1937) an anthropologist of Tuscarora descent made the "Creation Story" his specialty (Hewitt 1903, 1928). He called the story of The

Woman Who Fell from the Sky Iroquoian "cosmology." To call it a "myth," as some anthropologists did at the turn of the last century, was not well received by most Native Americans (also see Johnson 1996).

Background

Many individuals, going back to Squier and Davis (1848:47), have generalized the belief that the eastern U.S. earthworks (3500 BCE to 1500 CE) were for religious purposes. Still, the meaning of most of those mounds, and how they functioned in everyday society, remains academic conjecture. Byers (2004) posited that much of Hopewell

religion centered on world renewal ceremonies, with the sun and the moon being of pivotal importance. While we find no issues with this idea, he provides no details on ceremonies.

We preface our interpretations with the fact that the earliest global representations of the human form are the Paleolithic figurines of a female, sometimes called Earth Mother (Soffer, Adovasio, and Hyland 2000),² and that Native American groups, including the Meskwaki and Lakota (like groups from around the world), are a continuation of the animistic belief that a reproduction of the human (or animal) form, in some manner, enables humans to have power over nature or certain aspects of human behavior (see Balthazar 1992, especially page 31). Furthermore, all animistic groups spiritually acknowledge the fact that it is the female of any species that has reproductive powers and, thus, a fertility connection.

Bierhorst (2002:200) writes, "Reports by early travelers and missionaries indicate that The Woman Who Fell from the Sky was the principal myth..." of the Iroquois, Huron, Shawnee and Delaware. She is called by many different names. The Meskwaki reference her only as "Mother" (He-nau-ee). The Huron called her the fallen woman *Yatahéntshi*, meaning "ancient body." The Iroquois called her Sky Woman (Shenandoah and George 1996), and, for sake of brevity, that is the term we use.

The story has many variations, too numerous to detail here. However, certain aspects are necessary for interpreting the Portsmouth earthwork's configuration. For example, the opening scene of one version is in the world above, the sky vault, where a woman becomes the bride of a man. The woman becomes pregnant, and, for various reasons, depending on the teller, the tree of life in the sky world is uprooted, and the woman falls through the opening to Earth. In some versions the woman gives birth to two boys. In others, she has a daughter who will give birth to two boys and thus begins humanity (see Shenandoah and George 1996).

Portsmouth Earthworks, Group B

We propose that the two long sets of parallel earthworks extending west in Figure 1 are Sky Woman's arms upraised, and the circular enclosure in between them is her head. Notice that the arms are connected with a curvature in the upper mound thus connoting the neck and clavicle region of the human body. The two sets of parallel earthworks (one long and one short) extending east are Sky Woman's spread legs. We note that two illustrations of the Portsmouth mounds exist (see Figure 2). Presumably, artistic liberties were taken with Figure 2, for example, "straightening out" the arms and legs and shortening them (compare to Figure 1).

Since most of the earthwork complex no longer exists, anyone can argue that Figure 2 is the most accurate figure. Also, the accuracy of either map can be called into question (see Burks and Cook 2011). However, in general, the ultimate details will not alter the meaning we propose for the earthworks. While falling from the sky, any individual probably would be moving (flailing) her or his arms and legs, and presumably the undulations of the arm and leg portions of the mounds might represent such movement (see Figure. 1). We follow Riordan's (2010:222) interpretations of "satisfying Hopewellian notions of..." In other words, the Hopewell builders' notion of arms and legs flailing is represented in the undulating configuration of the mounds.³

Figure 1 shows the effigy's right leg extending across the Ohio River where it ends in a circular earthwork and Mound C. Clearly, the Ohio River divides the site into North and South components. Yet, Hopewell sites being divided by a river is not unique to the Portsmouth site. Byers (2004: 539) notes of Mound City, further up the Scioto River: "... four sets of earthworks straddle the Scioto River may have figured in the symbolic pragmatics of the cycle of solar/lunar world renewal rituals that they jointly performed." The meeting of the Scioto River with the Ohio River (at Portsmouth) was presumably, for the Hopewell, a place of major spiritual power (cf. Greeley 2017), probably

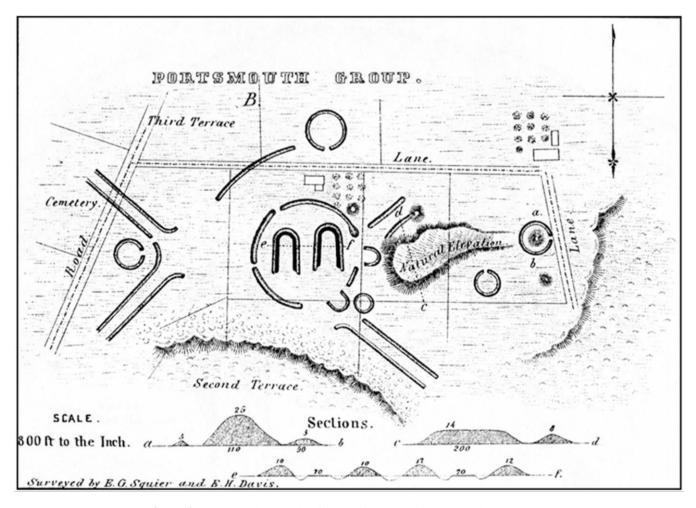


Figure 2. Portsmouth mounds after Squier and Davis (1848: Plate XXVIII).

helping to explain the reason for the amazing Portsmouth earthworks. The meeting of these two rivers would have been (is) a large body of water, and the spiritual leaders of the Hopewell might have designated it as *the actual spot* where The Woman Who Fell from the Sky landed, thereby explaining the extensive earthwork site created there. Moreover, an ecological foundation for this spiritual belief might be at work in the potentially abundant food resources where two rivers meet (see Stocker and Xiao 2019).

Figure 1 shows both a shortened left arm and left leg. Why this was the case only the ancient directors of the site's construction knew, and it may be debated forever. However, there is an extensive literature on the symbolism of left/right (Needham

1978), which shows that, globally, left is generally associated with evil, and so possibly, the left arm and left leg were attenuated to negate evil. However, it is also possible that the effigy was not finished.

The effigy's abdomen is demarcated by a circular configuration of four separate earthworks. In the lower portion of the abdomen, the pubic area, are two small, U-shaped enclosures which open into the abdomen. We propose that these two enclosures in the effigy's pubic area are the heads of the two sons as would be seen at the beginning of birth. However, one of these (on the right) appears to emerge from the side. In many of the legends, one of the twins is born from Sky Woman's side, thus killing her (Spence 2005;

Shenandoah and George 1996).

Referencing Owen's Meskwaki's rendition of He-nau-ee (Mother), the two sons grew quickly; and we propose that the two large U-shape enclosures opening to the south, represent the boys at maturity. Notice that the ends of these enclosures in Figure 2 are finished on an angle (not flat) as though they *might have been* meant to represent hair (assuming that Squier and Davis' rendition is correct).

The natural ridge between the legs was possibly viewed as a male penis impregnating Sky Woman, again referencing Owen's description above. Certainly, the Lakota saw natural landscape features as representing aspects of their cosmology (see Goodman 1992). Likewise, Riordan (2010) explores how natural topographic characteristics were combined with Hopewell construction projects, especially at the Pollock Works in Ohio.

Finally, in an Iroquois variant of the story, corn grows from the woman's breasts (Bierhorst 2002:200). So, maybe the vacant space of the breast-area was an area for planting "ceremonial" corn. While maize remains are not abundant in Hopewell archaeology, they do exist (cf. Sykes 1981). Furthermore, even if rare, the breast area might have been the ideal place to plant maize, which might have been utilized as a ceremonial food. We return to ceremonial food below.

Celestial Alignments

It is now accepted fact that prehistoric peoples around the world regulated much of their lives around religious worship of the stars. Obviously, Native Americans oriented many of their mounds to the stars and this was the case for Ohio's Hopewell (Hively and Horn 2010; Horton 2005; Stocker 1981). Romain (2015, Fig. 5.44) notes "Group B earthwork [Portsmouth] is situated so that as viewed from its center, the moon's maximum north rise and maximum north set appear over nearby hills." We add that Group B is laid out so that the east-facing opening in the head would receive the equinox rising sun. Of course, the sun

would also rise above the penis ridge.

The left leg and left arm, at the junctures with the body, are oriented toward the summer solstice sunrise and sunset (directions), respectively. The right leg and right arm, at the juncture of the body, are oriented toward the winter solstice sunrise and sunset, respectively. In other words, if one were to stand on the right leg, for example, where it joins the abdomen, the sun would rise somewhere over the leg further to the east. This is just a suggestion, which we hope will be explored by future archaeologists.

It is important, we think, to embed possible alignments in an awareness that the Native Americans saw the entire night sky as an integrated whole, and they regulated their lives around the movement of those stars. We emphasize that this is only recently published data for archaeologists, and only for certain groups: Lakota (Goodman 1992) and Crow (McCleary 1997); and for both groups, they seemingly leave no star in the night sky unaccounted for.⁵ The Lakota and Crow also associate many stars with their respective landscapes (especially see McCleary 1997: 40). This cultural knowledge (worldview) exists only among the old people, and anthropologists are lucky to have the records/information that we do. That knowledge will be gone soon. For us, the information presented by Goodman (1992) and McCleary (1997) was—and continues to be more than important. In other words, for us, it certainly reinforces the tight symbolic, cosmological link Byers (2004), Romain (2000:167, 2004), and Riordan (2010:221-225) have expounded on with regard to the contiguous nature of Adena and Hopewell mounds presumably representing earth and heaven.

We raise the question: Did the Hopewell separate heaven and earth (as most modern anthropologists do) or were they an integrated whole? This is a very complex phenomenological question, which we do not answer here; however, we consider one Crow version of the origins story.

When the Twins returned to earth they went to their mother and she told them that the people in the sky were like birds, they could fly about as they pleased. Since the opening was made in the heavens, they may come down to earth. If a person lives well on earth, his spirit takes flight to the skies and is able to come back again and be reborn (told by Arthur Mandan, Hidatsa Elder, in McCleary 1997:v).

Continuing, the Meskwaki, like many Native American groups, did not believe the setting sun went behind the earth (or into an underworld) to come up in the east; rather, they believed it went from west to north and then back to east. So, we propose that the arced earthwork at Portsmouth, extending out from the left armpit of Sky Woman possibly indicates the path of the sun as it reaches its northern zenith, and the circular enclosure to the west represents the sun in the north.⁶ By comparing Figure 1 to Figure 2, discrepancies in depictions of this area of the site are apparent. The arcing earthwork is below the sun in Figure 1, as well as further to the west. We may never know which is correct, but any answer would not impact our interpretations.

Mound C

Sky Woman's right leg appears to extend across the Ohio River (into Kentucky). However, Romain (2015: fig. 5.42) has determined that the right leg does not resume on the Kentucky side directly across from the Ohio segment but rather about 2 miles upstream to the east. At present, we can only say that it would be strange for the Kentucky elongated mound to exist at all if not somehow connected to the Portsmouth B complex. This issue is at an impasse without excavations. Presumably, the Hopewell directors of the mounds had a reason for this currently seen discrepancy. Maybe Sky Woman broke her leg in the fall? Nevertheless, the Kentucky long, wavering mound ends in a configuration of concentric embankments surrounding a central mound: Mound C. Furthermore, the embankments are broken by four parallel-walled passageways leading to the central mound.

For a general meaning of the circular mounds, we can draw upon many general Native American assumptions about circularity. For the Cherokee, the Stomp Dance and other ceremonies involve movement in a circular pattern. Of course, many Native American groups sometimes dance in a circle. Also, in ancient times, the fires in the council houses were built by arranging the wood in a continuous "X" so that the fire would burn in a circular path.

The total configuration of the Mound C group is unique in the Adena/Hopewell landscape; how-Hopewellian double concentric embankments exist (cf. Lepper 2010: Fig. 4.4). This is also the case with certain Adena mounds (cf. Thomas 1894). To more fully explain Mound C, we introduce an idea about concentric circles related to Lakota midwives' teachings about birth and the nature of being human. Each human is perceived as expanding spiritual concentric circles. The innermost circle is *Nagi la*, which is the divine spirit immanent in each being. The next circle out is Nagi, the individual soul. The third circle is Sicun, the intellect, and the final circle is Niya, the body.

Blue Woman or Birth Woman is a spirit who dwells in the center [an imaginary circle in the dark void] of the Big Dipper constellation. She aids midwives in delivering babies; guides the baby's nagi into this world, and eases the pains of the mother and child during labor (Goodman 1992:41).

Group A

Given the entire context of the Portsmouth mounds, we assume that Group A (in Kentucky) was at one time attached to the right arm and possibly a symbolic hand of The Woman Who Fell from the Sky. Group A is structurally complex and has clear ties to other Hopewell earthworks upriver, especially Mound City with its standardized unit of measure in the layout (Romain 2015:152-153). Furthermore, as Romain (2015:151) has pointed out, Group A is situated precisely at the

former confluence of the Scioto and Ohio rivers. Romain's (2015: Fig. 5.40, 5.41) analysis of Group A shows a specific winter solstice sunrise alignment for the square, going from north to south. We hope future scholars will look for stellar alignments, especially Sirius, a star that regulated much of Native American life in the eastern U.S. (see Holberg 2007). Certainly Group A, and the entire Portsmouth Group, would benefit from a magnetic gradient survey (cf. Burks and Cook 2011).

Discussion

A Gathering Place

As with many new interpretations in the social sciences, opposition is sometimes quickly voiced. We only say that our suggestions are offered as possibilities. Even if not Sky Woman, the size of the Portsmouth complex would have made it a gathering place for many people. It certainly was not just for local people. Whatever the earthworks represent, they were so large that they were not bounded by enclosures like many other Hopewellian mound groups (cf. Riordan 1998). This fact alone, had to impress prehistoric viewers.

Still, the outline of a very basic human form undeniably existed in the Portsmouth mound group. If it is Sky Woman, then what might be deduced? At a total length of eight miles, the Portsmouth figure would be the longest human effigy in the world, dwarfing NASCA's largest figure at 1200 feet (see Aveni 2015). This is not a fact that should be taken in isolation. While a totally developed argument is beyond the bounds of the present article, the size of the Portsmouth effigy might make it the most important mound group of the Scioto River Valley, which is lined on both sides with Hopewell earthworks. Furthermore, we might assume that the size of the Portsmouth effigy would make it the most important mound group in the entire Hopewell Interaction Sphere. Certainly, if the Portsmouth complex represents the Native American creation story being considered, the site would be comparable to Jerusalem for Christians. The fact that no portion of the Portsmouth mound group has ever been excavated, much less interpreted as to meaning, has caused it to be virtually left off the worldview of archaeologists specializing in Hopewell archaeology.

We propose that most Hopewell people, living in the Scioto River Valley, phenomenologically perceived all the Hopewell earthworks of the Scioto River Valley as an integrated unit. And, based on size and possible meaning, we feel that a site like Portsmouth was not just for local people but was a ritual center attracting people both in the Scioto River Valley and from distant places. Of course, we are talking about a 400-year period, so at one point the mound group, like all mound groups, was a smaller version of what would come to be.

We agree with Lepper (1996) that certain Hopewell sites were pilgrimage centers. Criticisms of Hopewell pilgrimage have been voiced, but since that time, abundant data has been presented on prehistoric pilgrimage, including an entire 2018 issue of World Archaeology (also see Stocker and Ortega 2019). Certainly, the presentday Lakota make many pilgrimages throughout the year to their holy sites (Goodman 1992: 11; also see Chaudhuri and Chaudhuri 2001). Spence and Fryer (2005:731) provide unique insights into Hopewellian possible pilgrimage. (2010:197), drawing on Buckley's (2002) detailed ethnographic work, writes, of the entire Scioto Ceremonial Zone, that certain of the excavated structures were

...hostels for local visitors or foreign pilgrims drawn to the Scioto to witness or otherwise participate in ceremonial spectacles designed to set the cosmos right, to feast, dance, and socialize with other congregants, to outdo the performances of competing congregations, to be committed to movers of earth when collective labor was required, to bury the dead, or, long after the heyday of a particular monument had passed, to revisit ancestors interred there.

We are not without first-person experience of pilgrimage. Stocker has spent nearly 50 years recording Otomi life ways, Native Americans of central Mexico (Stocker 1986, 2014). He has made the three-day walking pilgrimage, with a group of 500 men, women and children, from Tula, Hidalgo, Mexico to the Basilica of the Virgin of Guadalupe, Mexico City (75 miles). That basilica is the most visited site in the Catholic realm, with over 1 million pilgrims a year—and most go walking, some of them a greater distance than that from Portsmouth to Newark.7 We feel that The Woman Who Fell from the Sky would have attracted people from distant places, like Jerusalem has (Christians and Muslims-for 2000 years). We can imagine Hopewell elders in Iowa or Ontario, for example, telling their children about the large earthworks, representing the Woman Who Fell from the Sky, in a very distant land.8

The word "pilgrimage" can connote a singular religious purpose of the participants, and we do find this to be highly plausible for the Portsmouth site; in other words, we can envision entire small communities traveling as a group to Portsmouth. A critical, but not so easily comprehended concept (for us anthropologists), is the *total ethos of community* life of past cultures (and certain extant ones). To more fully grasp "community," we recommend Hancock's (2010) "The Earthworks Hermeneutically Considered."

Archaeologists might debate "pilgrimage"; yet, we find it totally implausible that the Hopewell, from distant communities, did not get together for tribal events. Tribal "get-togethers" are found around the world, with people traveling major distances to participate in events, some of which are not for religion, at least ostensibly (cf. González-Ruibal and de Torres 2018; Riefenstahl 1973). In fact, many eastern North American Native groups traveled great distances to gather for ballgames, which would last for days (Culin 1907; Mooney 1890). Yet, there was always a religious component (like the current American sporting scene). Should we call the ballplayers (and children and wives) pilgrims? Maybe this is not the

right question: Did they call themselves pilgrims?

The major underlying fundamental issue here is whether we see the Hopewell landscape as static or alive. We are unaware of any static societies, and Greber (2010) presents salient data that the Hopewell were not static. Most readers of this article (as well as the two authors) have probably attended, or maybe participated in, county or state fairs. This is one model that we might use to understand the Hopewell earthworks. And contextualizing this analogy, county fairs are about agriculture (and "celebration" thereof). Surely, many of the Hopewell ceremonies were about the celebration of the many aspects of subsistence/ survival.

Ceremony

Contextualizing the Portsmouth complex as The Woman Who Fell from the Sky, we must consider what ceremony/festival might have been conducted/celebrated there. Many are the possibilities of observers/the audience. The entire gamut of possible ritual theater is beyond this paper, but we urge readers to appreciate Riordan's (2006, 2010:224) notions of "audience involvement" for Adena/Hopewell sites.

Repeating from above, tribes from around the world had get-togethers/festivals. About the ancient Moche of Peru's north coast, Swenson (2018:333) wrote, "...temporary festivals provided one of the principal means to 'assemble' larger political alliances that transcended parochial kin and cultic affiliations...." More importantly he (Swenson 2018: 329) generalizes a very different phenomenological perspective between the archaeologists and members of the past, "...space and time coalesced in very different ways as determined by historically distinct ideologies and structure of practice."

We think that the Portsmouth mound group might have hosted a regional event like the "Green Corn Ceremony" (cf. Howard 1961; Owen 1904:52). This was the major ceremony of Native Americans throughout the eastern United States (Adair 1775, Bartram 1973, Witthoft 1949). It is

similar to the U.S. Thanksgiving, which was presumably "borrowed" from Native Americans' Green Corn Ceremony. However, Hudson (1978) has argued that the Green Corn Ceremony was much broader and more spiritual than the U.S. Thanksgiving.

Of course, two points must be entertained here. First, remains of maize at Hopewell sites are not abundant. Yet, this could make the foundations for the Green Corn Ceremony even that much more valid throughout the Hopewell Sphere, not just Portsmouth. In other words, early on in its domestication, maize might have been a ceremonial food. Certainly, maize as ceremonial food has documentation (see Logan, Hastorf and Pearsall 2012). One thing is certain, the Green Corn Ceremony, like all ceremonies, had to begin somewhere (cf. Stocker and Ortega 2019). Where was it? The second point: again, we are dealing with a 400-year period and until we have excavated results, we can only conjecture. We hope ideas presented here will be a foundation for excavations at Portsmouth.

Contextualizing "Green Corn Ceremony," we note a specific ethnographic analogy. Among most tribal groups relying on hunting along with gathering and agriculture, the majority of gathering and agriculture usually fell to the women. Of course, the division of labor among such groups is not a simple dichotomy as Bolger (2010) has demonstrated. Nevertheless, traditionally, among the Meskwaki and Sac, the women owned dwellings and implements for agriculture, dressing skins, making garments (and tents), and preparing food. The women planted crops, maintained the household and reared children (Blair 1912:216-217). This information helps contextualize the opening summation of "Revolt of the Squaws"; in other words, the women owned the houses, and they moved the houses. We might assume that for the ancient Hopewell, it was the women who told their creation story to their children. Those women might have had a pride that present-day women do not have. And it might have been the Hopewell women who were the main impetuous for pilgrimage, especially to see The Woman Who Fell from the Sky. In closing this section, we acknowledge a critique by one anonymous reviewer. We have suggested the Green Corn Ceremony, but the breast area might just as well have been for many other possible crops, and maybe more importantly: tobacco.

In final support of people attending religious ceremonies, we draw upon Martin D. Gallivan's (2016) detailed work of The Powhatan Landscape, in which he assembled an archaeological history of Algonquian culture of the Chesapeake region. He focused on the lower James and York River valleys, and utilizing a Native perspective, he discusses how the Virginia Algonquians perceived the landscape in which they lived. Especially important, we think, is the idea that Native place names derive from the vantage point of an individual viewing the landscape from a canoe on the water.

The Late Woodland settlements he proposes were under the governance of religious leaders, and those populations were culturally unified at periodic ceremonial events featuring feasting, as indicated by seven very large pits at the Clark's Old Field site, as well as specific ritual ossuaries. It is this kind of archaeological data that might be encountered at Portsmouth, if and when excavations are conducted.

Decision Making

We began this article with decision-making ("Revolt of the Squaws") and we end it with decision-making, one topic of anthropology (Boholm 2013). First, who decided to create the Portsmouth complex? Probably, we can say that some elite members, or one spiritual leader, of a Hopewell group decided to make earthworks to represent The Woman Who Fell from the Sky, if that is indeed what is represented.

Why were the Portsmouth mounds built? If we use a Marxist approach, the elite did it to control the masses. While this is probably obvious, we still cannot deny that those elite might have believed that the actual landing place of The Woman Who Fell from the Sky was at what is now

Portsmouth, Ohio. Around the world, people, elite and non-elite, believe they are communicating (via rituals) with the spiritual world, and around the world people impute specific locations on the landscape with sacredness for one reason or another.

In addition to the imputed sacredness of any natural place, people sometimes built their sites (even towns and cities) as a statement to the spiritual forces of the universe. Scholars term the arranging of buildings, in a specific order, to express a statement about cosmology and political order as cosmograms (Ashmore 1989; Carl et al. 2000). We believe that the Portsmouth earthworks were a cosmogram, an image of, a statement that, the beginning of humanity on Earth was at the location of Portsmouth, Ohio where The Woman Who Fell from the Sky actually fell to Earth.

How did the Hopewell elite decide they would accomplish building the earthworks? Stated another way: Who built the Portsmouth earthworks? Was it just locals? Griffin (1996) argued over two decades ago that people coming from as far away as Iowa helped build many Ohio Hopewell mounds (also see DeBoer 2010; Greber 2010). In the animistic world of the Hopewell, we might imagine that participants believed if one participated in the construction of an effigy mound one would derive certain spiritual benefits. Furthermore, there would have been the social "benefit" of interacting with "others." It is very unlikely that the Portsmouth mounds were built in one generation or even two.

In ending this section, we defuse the singular religious gist of our presentation. People might have come from Iowa for economic ends: trade. Of course, not everyone was trading, but probably the leaders of any groups might have been traders. We certainly concur with archaeologists proposing that long distance trade in the eastern U.S. was around long before the Hopewell (cf. Ellerbe and Greenlee 2015; Wood 1980). Spielmann's (2009) excellent article is essential for anyone wanting to elaborate on Hopewell long-range contact, trade, and ritual (also see Swenson 2015.)

Conclusion

The Hopewell worldview at one time was filled with a hierarchy of ceremonial sites and ceremonies. For us, the Portsmouth, Ohio Hopewell earthworks represent The Woman Who Fell from the Sky, a creation story. Its size would bespeak a role similar to Jerusalem for Christians. It was then and now, the largest human effigy in the world—if our interpretations are correct. In ending, we draw upon Paula Allen's opening quotation, that whatever happened at Portsmouth, its essence was the power that enabled magical things to happen.¹⁰

Certainly, excavations are needed at Portsmouth, and, hopefully, any excavations will deal with the issues of public and private "space" (Guengerich 2017; Weaver et al. 2011). Regarding private space, we repeat: among traditional Meskwaki and Sac, the women owned dwellings and implements for agriculture, dressing skins, making garments (and tents), and the women planted crops (Blair 1912:216-217; also see Heitman 2016; Lamphere 2000; Parsons and Moon 1921).

In concluding, Sered's (1991:7) words seem relevant,

It is axiomatic to feminist analysis that even within the context of patriarchal culture, women also create religion; that women cross-culturally are involved with beliefs and rituals that reflect and enhance their experiences, dramatize their dilemmas and desires, contribute to the resolution of their problems, and sacralize their everyday lives.

Beyond interpretations, we hope that the Ohio and Kentucky departments of tourism might make use of Portsmouth to draw attention to Native American ideology. We feel that the Portsmouth mounds, if developed and presented "properly," can rival settings like Stonehenge. However, there is always the question as Fernandes (2018) wrote: "But will there be visitors?"

Acknowledgements: We greatly benefited from many conversations with Meskwaki individuals, and Horton acknowledges tremendous gratitude to the Meskwaki tribal elders and the Meskwaki Nation families. Further, Alice Kehoe, Robert Riordan, Brad Lepper, Audrey Shalinsky, Jerry Roberts, and Jack Lamb helped us form certain ideas for this article. We also acknowledge the constructive comments of the anonymous reviewers. In the end, all interpretations are ours and are subject to change.

Endnotes

- 1. Both of our realities were greatly expanded through many extended conversations with the Meskwaki couple, Charles and Eleanor Pushetonequa. Indeed Horton's (and his wife's) time with the couple extended into decades.
- 2. Male sexual representation is also present in the Paleolithic (see Kehoe 1991).
- 3. For us, Riordan's 2010 article is one of the finer efforts of trying to enter the Hopewell mind. We hope our contribution here will add to that.
- 4. The Iowa River runs through the current Meskwaki settlement.
- 5. We note that Goodman's (1992) and McCleary's (1997) data create a completely different worldview than the limited one Stocker had in 1981 to write about celestial alignments in the eastern United States. This "new" data is less than two decades "old"! Indeed, Charles Riggs wrote "Confronting Cultural Imperialism in Native American Archaeology" as recently as August 10, 2017 (https://www.sapiens.org/archaeology/native-american-archaeology/) (also see Riggs 2018).
- 6. Notice that in Figure 2, the opening in the circular mound, representing the sun, is oriented due south.
- 7. Three relevant points: One, The Basilica of the Virgin of Guadalupe is the "worship" of a female entity. Second, the Basilica was placed where it is, at Tepeyac, on Mexico City's outskirts, because that was the place of worship of the Aztec mother goddess Tonantzin

- (Bushnell 1958). Third, during Aztec times Tonantzin's main ceremony was during the Winter Solstice (Flores Segura 1997:22), which parallels Group A at Portsmouth.
- 8. We presume that most readers of this article were in some way educated "with" Chaucer's story of pilgrimage: *Canterbury Tales*.
- 9. Here, any anthropologist can look at motivations in the current U.S. sporting scene with religious and political "overtures"/music, some of which are now protested.
- 10. Paula Allen grew up as a Native American in Laguna Pueblo.

References

Adair, J.

1775 *The History of the American Indians*. Edward and Charles Dilly, London.

Allen, Paula

1986 The Sacred Hoop: Recovering the Feminine in American Indian Traditions. Beacon Press.

Ashmore, Wendy

1989 Construction and Cosmology: Politics and Ideology in Lowland Maya Settlement Patterns. In *Word and Image in Maya Culture: Explorations in Language, Writing, and Representation*, edited by William F. Hanks and Don S. Rice, pp. 272-286. University of Utah Press.

Aveni, Anthony F.

2015 Between the Lines: The Mystery of the Giant Ground Drawings of Ancient Nasca, Peru. University of Texas Press, Austin.

Balthazar, Richard

1992 Remember Native America! The Earthworks of Ancient America. Five Flowers Press, Santa Fe, New Mexico.

Bartram, William

1973 (1792) Travels through North and South Carolina, Georgia, East and West Florida. University Press of Virginia, Charlottesville.

Bierhorst, John

2002 *The Mythology of North America*. University of Oklahoma Press, Norman.

Blair, Emma

1912 The Indians Tribes of the Upper Mississippi Valley and Region. The Arthur H. Clark Co., Cleveland, Ohio.

Boholm, Åsa

2013 Anthropology and Decision Making: An Introduction. *European Journal of Anthropology* 65:97-113. Bolger, Diane

2010 The Dynamics of Gender in Early Agricultural Societies in the Near East. *Signs* 35(2):503-531.

Buckley, Thomas

2002 Standing Ground: Yurok Indian Spirituality 1850-1990. University of California Press, Oakland.

Burks, Jarrod, and Robert A. Cook

2011 Beyond Squier and Davis: Rediscovering Ohio's Earthworks Using Geophysical Remote Sensing. *American Antiquity* 76:667-689.

Bushnell, John

1958 La Virgen de Guadalupe as Surrogate Mother in San Juan Aztingo. *American Anthropologist* 60(2): 261-275.

Byers, A. Martin

2004 The Ohio Hopewell Episode: Paradigm Lost, Paradigm Gained. University of Akron Press, Akron, Ohio.

Carl, Peter, Barry Kemp, Ray Laurence, Robin Coningham, Charles Higham, and George L. Cowgill

2000 Were Cities Built as Images? *Cambridge Archaeological Journal* 10:327-365.

Chaudhuri, Jean, and Joyotpaul Chaudhuri

2001 A Sacred Path: The Way of the Muskogee Creeks. UCLA American Indian Studies Center, Los Angeles.

Colwell-Chanthaphonh, Chip, and Thomas J. Ferguson

2010 Intersecting Magisteria: Bridging Archaeological Science and Traditional Knowledge. *Journal of Social Archaeology* 10(3): 325-346.

Culin, Stewart

1907 *Games of the North American Indians*. Dover Publishing.

DeBoer, Warren

2010 Strange Sightings on the Scioto. In Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes, edited by A. Martin Byers and DeeAnne Wymer, pp. 15-198. University Press of Florida, Gainesville.

Edmunds, Russell D.

1993 The Fox Wars. The Mesquakie Challenge to New France. University Oklahoma Press, Norman.

Ellerbe, Jenny, and Diana M. Greenlee

2015 Poverty Point: Revealing the Forgotten City. Louisiana State University Press, Baton Rouge.

Elm, Demus, and Harvey Antone

2000 *The Oneida Creation Story*. University of Nebraska Press, Lincoln.

Fernandes, Antonia Bartarda

2018 "But will there be visitors?" Public outreach efforts using social media and online presence at the Côa Valley Museum and Archaeological Park (Portugal), Internet Archaeology 47. https://doi.org/10.11141/ia.47.5

Flannery, Kent V., and Joyce Marcus

1993 Cognitive Archaeology. *Cambridge Archaeology Journal* 3(2):260-270.

Flores Segura, J.

1997 *Tonantzin, Guadalupe*. Editorial Progreso, Mexico City.

Gallivan, Martin D.

2016 The Powhatan Landscape: An Archaeological History of the Algonquian Chesapeake. University Press of Florida, Gainesville.

González-Ruibal, Alfredo, and Jorge de Torres

2018 The Fair and the Sanctuary: Gathering Places in a Nomadic Landscape (Somaliland, 1000-1850 AD). *World Archaeology* 50:1-18.

Goodman, Ronald

1992 Lakota Star Knowledge: Studies in Lakota Stellar Theology. Sinte Gleska University, Mission, South Dakota

Greber, N'omi B.

2010 Coda: Still Seeking "Hopewell". In *Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes*, edited by A. Martin Byers and DeeAnne Wymer, pp. 335-348. University Press of Florida, Gainesville.

Greeley, June-Ann

2017 Water in Native American Spirituality: Liquid Life-Blood of the Earth and Life of the Community. *Green Humanities* 2:156-179.

Griffin, James B.

1996 The Hopewell Housing Shortage in Ohio, A.D. 1-350. In *A View from the Core: A Conference Synthesizing Ohio Hopewell Archaeology*, edited by Paul J. Pacheco, pp. 4-15. Ohio Archaeological Council, Columbus.

Guengerich, Anna

2017 Domestic Architecture and the Materiality of Public Making in Pre-Columbian Eastern Peru. *Journal of Social Archaeology* 17(3):263-284.

Hall, Robert L.

1997 An Archaeology of the Soul: North American Indian Belief and Ritual. University of Illinois Press, Champaign.

Hancock, John

2010 The Earthworks Hermeneutically Considered. In *Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes*, edited by A. Martin Byers and DeeAnne Wymer, pp. 263-275. University Press of Florida, Gainesville.

Heitman, Carrie C.

2016 "A Mother for All the People": Feminist Science and Chacoan Archaeology. *American Antiquity* 81(3):471-489.

Hewitt, J.N.B.

1903 Iroquoian Cosmology, Part 1. *Annual Reports Bureau of American Ethnology* 21:127-339.

1928 Iroquoian Cosmology, Part 2. Annual Reports Bureau of American Ethnology 43:449-819.

Hively, Ray, and Robert Horn

2010 Hopewell Cosmography at Newark and Chillicothe, Ohio. In *Hopewell Settlement Patterns*, *Subsistence*, and *Symbolic Landscapes*, edited by A. Martin Byers and DeeAnne Wymer, pp. 128-164. University Press of Florida, Gainesville.

Holberg, Jay B.

2007 Sirius: Brightest Diamond in the Night Sky. Springer Science & Business Media.

Horton, George

2005 Sacred Hoop Buffalo Constellation and Midwest Mound Patterns. Paper presented at the Midwest Archaeological Conference, October 20-23, 2005, Dayton, Ohio.

2016 From Creation to the Great Depression: A Fox Nation Timeline. Paper presented at the Midwest Archaeological Conference, October 6-8, 2016, Iowa City, Iowa.

Howard, James H.

1961 Cultural Persistence and Cultural Change as Reflected in Oklahoma Seneca-Cayuga Ceremonialism. *Plains Anthropologist* 6(11):21-30.

Hudson, Charles M.

1978 *The Southeastern Indians*. University of Tennessee Press, Knoxville.

Johnson, George

1996 Indian Tribes' Creationists Thwart Archaeologists.
The New York Times, October 22, 1996.
https://www.nytimes.com/1996/10/22/science/indiantribes-creationists-thwart-archeologists.html

Kehoe, Alice B.

1991 No Possible, Probable Shadow of Doubt. *Antiquity* 56:129-131.

Lamphere, Louise

2000 Gender Models in the Southwest: A Sociocultural Perspective. In *Women and Men in the Prehispanic Southwest: Labor, Power and Prestige*, edited by Patricia L. Crown, pp. 379-402. School of American Research Advanced Seminar Series, Cambridge University, Cambridge, United Kingdom.

Lepper, Bradley T.

1996 The Newark Earthworks and the Geometric Enclosures of the Scioto Valley: Connections and Conjectures. In *A View from the Core: A Synthesis of Ohio Hopewell Archaeology*, edited by Paul J. Pacheco, pp. 224-241. The Ohio Archaeological Council, Columbus.

2010 The Ceremonial Landscape of the Newark Earthworks and the Raccoon Creek Valley. In *Hopewell Settlement Patterns*, *Subsistence*, *and Symbolic Landscapes*, edited by A. Martin Byers and DeeAnne Wymer, pp.97-127. University Press of Florida, Gainesville.

Logan, Amanda L., Christine A. Hastorf and Deborah L. Pearsall

2012 "Let's Drink Together": Early Ceremonial Use of Maize in the Titicaca Basin. *American Antiquity* 23(3):235-258.

McCleary, Timothy P.

1997 The Stars We Know: Crow Indian Astronomy and Lifeways. Waveland Press Inc., Long Grove, Illinois.

Mooney, James

1890 The Cherokee Ball Game. American

Anthropologist (o.s.) 3(2):105-132.

Needham, Rodney (editor)

1978 Right-Left: Essays on Dual Symbolic Classification. University of Chicago Press.

Owen, Mary Alicia

1904 Folk-Lore of the Musquakie Indians of North America. Published for the Folk-lore Society by David Nutt. London.

Parsons, Elsie Worthington Clews, and White Moon

1921 *Notes on the Caddo*. Memoirs of the American Anthropological Association, (Supplement to the American Anthropologist) Vol. 43, No. 3, Part 2.

Riefenstahl, Leni

1973 The Last of the Nuba. St. Martin's Press, New York.

Riggs, Charles R.

2017 Confronting Cultural Imperialism in Native American Archaeology. Electronic resource, https://www.sapiens.org/archaeology/native-american-archaeology/

2018 Indigenizing Archaeology in the 21st Century. Presented at the 83rd Annual Meeting of the Society for American Archaeology, April 12-15, 2018, Washington, D.C.

Riordan, Robert V.

1998 Boundaries, Resistance, and Control: Enclosing the Hilltops in Middle Woodland Ohio. In *Ancient Earthen Enclosures of the Eastern Woodlands*, edited by Robert C. Mainfort Jr. and Lynne P. Sullivan, pp. 68-84. University Press of Florida, Gainesville.

2006 Altering a Middle Woodland Enclosure: Questions of Environment. In *Recreating Hopewell*, edited by Douglas K. Charles and Jane E. Buikstra, pp. 146-157. University Press of Florida, Gainesville.

2010 Enclosed by Stone. In *Hopewell Settlement Patterns, Subsistence, and Symbolic Landscapes*, edited by A. Martin Byers and DeeAnne Wymer, pp. 215-229. University Press of Florida, Gainesville.

Romain, William F.

2000 Mysteries of the Hopewell: Astronomers, Geometers, and Magicians of the Eastern Woodlands. University of Akron Press, Akron, Ohio.

2004 Journey to the Center of the World: Astronomy, Geometry, and Cosmology of the Fort Ancient Enclosures. In *The Fort Ancient Earthworks: Prehistoric Lifeways of the Hopewell Culture in Southwestern Ohio*, edited by Robert P. Connolly and Bradley T. Lepper, pp. 66-83. Ohio Historical Society, Columbus.

2015 An Archaeology of the Sacred: Adena-Hopewell Astronomy and Landscape Archaeology. The Ancient Earthworks Project, Olmsted Township, Ohio.

Sered, Susan Starr

1991 Childbirth as a Religious Experience? Voices from an Israeli Hospital. *Journal of Feminist Studies in Religion* 7(2):7-18.

Shenandoah, Joanne, and Douglas M. George

1996 Skywoman: Legends of the Iroquois. Clear Light Books, Santa Fe, New Mexico.

Soffer, Olga, James M. Adovasio, and David C. Hyland 2000 The "Venus" Figurines. *Current Anthropology* 41(4): 511-537.

Spence, Lewis

2005 *Iroquois Indian Myth and Legends*. Kessinger Legacy Reprints, Whitefish, Montana.

Spence, Michael W., and Brian J. Fryer

2005 Hopewellian Silver and Silver Artifacts from Eastern North America: Their Sources, Procurement, Distribution and Meaning. In *Gathering Hopewell: Society, Ritual and Ritual Interaction*, edited by Christopher C. Carr and D. Troy Case, pp. 714-738. Springer, Boston, Massachusetts.

Spielmann, Katherine A.

2009 Ohio Hopewell Ritual Craft Production. In *In the Footprints of Squier and Davis: Archaeological Fieldwork in Ross County, Ohio*, edited by Mark J. Lynott, pp. 179-188. Special Report No. 5. Midwest Archaeological Center, National Park Service, Lincoln, Nebraska.

Squier, Ephraim G., and Edwin H. Davis

1848 Ancient Monuments of the Mississippi Valley; Comprising the Results of Extensive Original Surveys and Explorations. Smithsonian Contributions to Knowledge, Vol. 1. Smithsonian Institution, Washington D.C.

Stocker, Terry

1981 A note on Eastern U.S. Site Orientations. *Archaeo-astronomy* 4(3):24-29.

1986 Wild Growing Plant Utilization by the Otomi Indians. *Mexicon* 8:69-72.

2014 The Last Fertility Dance (in Central Mexico)? Globalethnographic. Electronic resource, http://global ethnographic.com/index.php/the-last-fertility-dance-incentral-mexico/

Stocker, Terry, and V. Ortega

2019 El Culto del Cocodrilo: Cognición para el Arte Mesoamericano Formativo Temprano. *Arqueologia*. In press, February 2019.

Stocker, Terry, and J. Xiao

2019 Early State Formation: A Complete Rejection of the Circumscription Theory. *Social Evolution and Theory*. In press, September 2019.

Swenson, Edward R.

2015 The Archaeology of Ritual. *Annual Review of Anthropology* 44:329-345.

2018 Assembling the Moche: the Power of Temporary Gatherings on the North Coast of Peru. *World Archaeology* 50:62-85.

Sykes, Clark M.

1981 Northern Iroquoian Maize Remains. *Ontario Archaeology* 35:23-33.

Thomas, Cyrus

1894 *Mound Explorations*. Twelfth Annual Report, Bureau of Ethnology. Washington D.C. (reprinted 1985).

Voegelin, Charles F., and Erminie Wheeler Voegelin

1944 The Shawnee Female Deity in Historical Perspective. *American Anthropologist* 46 (3):370-375.

Weaver, Sarah A., Elliot M. Abrams, AnnCorinne Freter, and Dorothy Sack

2011 Middle Woodland Domestic Architecture and the Issue of Sedentism. *Journal of Ohio Archaeology* 1:22-40

Witthoft, John

1949 Green Corn Ceremonialism in the Eastern Woodlands. Occasional Contributions No. 13. Museum of Anthropology, University of Michigan, Ann Arbor.

Wood, W. Raymond

1980 Plains Trade in Prehistoric and Protohistoric Intertribal Relations. In *Anthropology on the Great Plains*, edited by W. Raymond Wood and Margot Liberty, pp. 98-109. University of Nebraska Press, Lincoln.